REMARKS

The non-final Office Action dated April 14, 2010 notes the following rejections: claims 1-10, 12, 18-27 and 33 stand rejected under 35 U.S.C. § 103(a) over Birru (U.S. Patent Pub. 2002/0037058) in view of Raghaven (U.S. Patent No. 6,115,418); claims 11 and 28 stand rejected under 35 U.S.C. § 103(a) over the '058 and '418 references in view of Johnson (U.S. Patent No. 5,808,574); and claim 17 stands rejected under 35 U.S.C. § 103(a) over the '058 and '418 references in view of Thomas (U.S. Patent Pub. 2004/0013084). Claims 34-36 are objected to but would be allowable if rewritten. Applicant respectfully traverses all claim rejections, and further does not acquiesce to any averment made in the Office Actions of record, unless Applicant explicitly states otherwise.

Applicant appreciates the indicated allowable subject matter of claims 34-36, should the claims be rewritten in independent form.

Applicant traverses each of the rejections for lack of correspondence and respectfully submits that the Office Action does not address the substance of Applicant's previous arguments. For example, the Office Action fails to reconcile the significant inconsistencies between the teachings of the references and the alleged combination thereof. Applicant's previous response identified several problems with the proposed combination (as relevant to each of the rejections), including technical details for why the proposed combination appears nonfunctional. The instant Office Action provides no clarification or rebuttal thereto. Accordingly, the record establishes that the proposed combination relies upon an illogical combination and that appears to be nonfunctional. Moreover, the record supports that the proposed combination would not provide the benefit that forms the basis of the rejection.

Applicant invites a review of the teachings of the '418 reference. For example, the Abstract indicates that the system is designed for "A 100BASE-TX detection system...Utilizing the nature of the frequency response function of category-5 twisted pair cabling." For more particulars of this carefully designed system a review of Cols. 7-9 can be made. For example, the '418 reference explains the significance of the specific properties of the MLT3/Ethernet transmission system relative to the relied upon infinite impulse response decision feedback equalizers. No guidance is provided for how such aspects would be implemented within the VSB or COFDM-type systems of the primary '058 reference.

In view of the evidence of record and the failure to provide clarification, the Office Action appears (at best) to assert that perhaps a skilled artisan might find some combination obvious to try. This assertion is made despite the lack of guidance and the apparent requirement that the skilled artisan redesign the system in a manner that would seem to require that unidentified parameters be varied for a vaguely defined goal. Such an "obvious to try" standard may not be applied where one would have "to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." *In re Kubin*, 561 F.3d 1351, 1359-1360 (Fed. Cir. 2009), *interpreting KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (U.S. 2007). *See also* M.P.E.P. § 2143(e), and *Gillette Co. v. S.C. Johnson & Son, Inc.*, 919 F.2d 720, 725 (Fed. Cir. 1990) ("we have consistently held that 'obvious to try' is not to be equated with obviousness.") Thus, the lack of specific guidance as to the particular form of the proposed combination, including how to achieve the proposed combination renders the rejection invalid. Moreover, Applicant submits that the skilled artisan would not seek such a modification because the evidence of record would suggest that the proposed modification would function properly. There is no explanation or evidence in the record that would support such a modification. Further details of this and other failings, also not addressed in the Office Action, are discussed hereafter.

As noted in the previous Response, none of the asserted references teaches the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.,* an adding circuitry for adding the output signal of said feedback filter circuitry to the output signal of said first section, a feedback filter circuitry for performing a linear filtering of a signal derived from an output signal of said second section, and/or a detector circuitry for extracting samples from the output signal of said adding circuitry.

A principle goal of the primary '058 reference relates to a multi-standard (VSB/COFDM) demodulator (*see, e.g.*, Abstract). The particular details of this multi-standard demodulator relate to complex algorithms designed specifically for a demodulator that is to be compatible with VSB and COFDM signaling. The circuit is designed for both cost-effectiveness and to maintain memory requirements consistent with conventional OFDM decoders. Thus, the '058 reference does not suggest that additional circuitry and/or filtering is beneficial or desired. Any such additions would need to be carefully considered relative to the teachings of the '058 reference

and would not be added simply because it performs some general function in another carefully designed system.

The relied upon aspects of the '418 reference are specifically designed for a system using a twist-pair transmission line that operates by decoding MLT3 decisions. MLT3 is a three symbol communication system that uses three voltages to encode binary values (*see, e.g.,* Col. 1:40- Col. 2:35 of the '058 reference). Col. 10:25 of the '418 reference states that the relied upon embodiment shown in Figure 7 includes the slicer 404 shown and described in Figure 5. As explicitly labeled in Figure 5, slicer 404 processes MLT3 signals to output a decoded MLT3 signal$\{\hat{a}_k\}$. Therefore, MLT3 signals are expected by the relied upon embodiment shown in Figure 7. No evidence or articulated explanation has been provided to explain how such MLT3 processing would work with the teachings of the '058 reference. The cited embodiment of the '418 reference performs decoding based on MLT3 signals. Accordingly, the MLT3 decoding process disclosed in the '418 reference would appear incapable of processing the OFDM/VSB-based (non-MLT3) output as taught by the cited embodiment of the '058 reference. As such, the evidence of record strongly suggests that the asserted combination would render the '058 reference incapable of operating for its intended purpose in the proposed combination. Accordingly, there is not a *prima face* case of obviousness and the § 103 rejection fails. Applicant requests that it be withdrawn.

Specifically addressing the Office Action's conclusion that the skilled artisan would implement the proposed modification to "reduce the ISI effects within the system" (Office Action, p. 6), Applicant submits that the evidence of record does not support this conclusion. For example, the various aspects of the '418 reference appear to rely upon a mathematical approximation of cabling for fast Ethernet transmission (*see, e.g.*, equation 11, Col. 7:10). Moreover, OFDM signaling is often used because it is particularly robust against ISI interference because the lower symbol rate allows for guard intervals to be increased. It is also unclear what effect a circuit designed for MLT3-based communications would have in a system designed for OFDM-based communications. No solution is evident from the references and the Office Action has not provided any guidance beyond a conclusion that the rejection is proper. Accordingly, the evidence of record supports Applicant's unrebutted showing that the proposed modification would not provide the alleged benefit, which forms the only basis for the conclusion of obviousness.

Because each of the rejections relies upon the same improper combination, Applicant submits that each rejection is improper and Applicant requests that each rejection be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, David Schaeffer, of NXP Corporation at (212) 876-6170.

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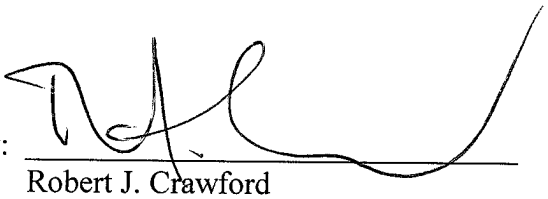
By: 

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